Appl. No.: 10/601,384

Amendment dated December 5, 2008

Response to Office Action mailed December 5, 2008

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-12 (canceled)

Claim 13 (currently amended) A maximum likelihood (ML) sparse decoder for block codes comprising:

a hypothesis generator operational to iterate over all possible values of a predetermined transport format combination indicator (TFCI).:

a code word generator operational to generate a corresponding encoded TFCI for the hypothesis that is being decoded in a desired iteration;

a correlator operational to correlate the corresponding encoded TFCI to the seft output of an associated rake receiver, the correlator comprising:

a plurality of multiplexers, each multiplexer having a first input for receiving a corresponding bit of the received transport format combination indicator (TCFI) signal, a second input for receiving the sign of the corresponding bit of the received transport format combination indicator (TCFI) signal, and a control input for receiving a corresponding bit of the encoded TFCI generated by the code word generator, and

<u>a summer for adding the outputs of the multiplexers to generate a final</u> correlation value; and

a maximum finder operational to compare the <u>final</u> correlation <u>value</u> result for the current iteration with that of the immediately previous iteration to determine the most correlated hypothesis.

TI - 36150 4

Appl. No.: 10/601,384 Amendment dated December 5, 2008 Response to Office Action mailed December 5, 2008

Claims 14-16 (canceled)

TI - 36150 5